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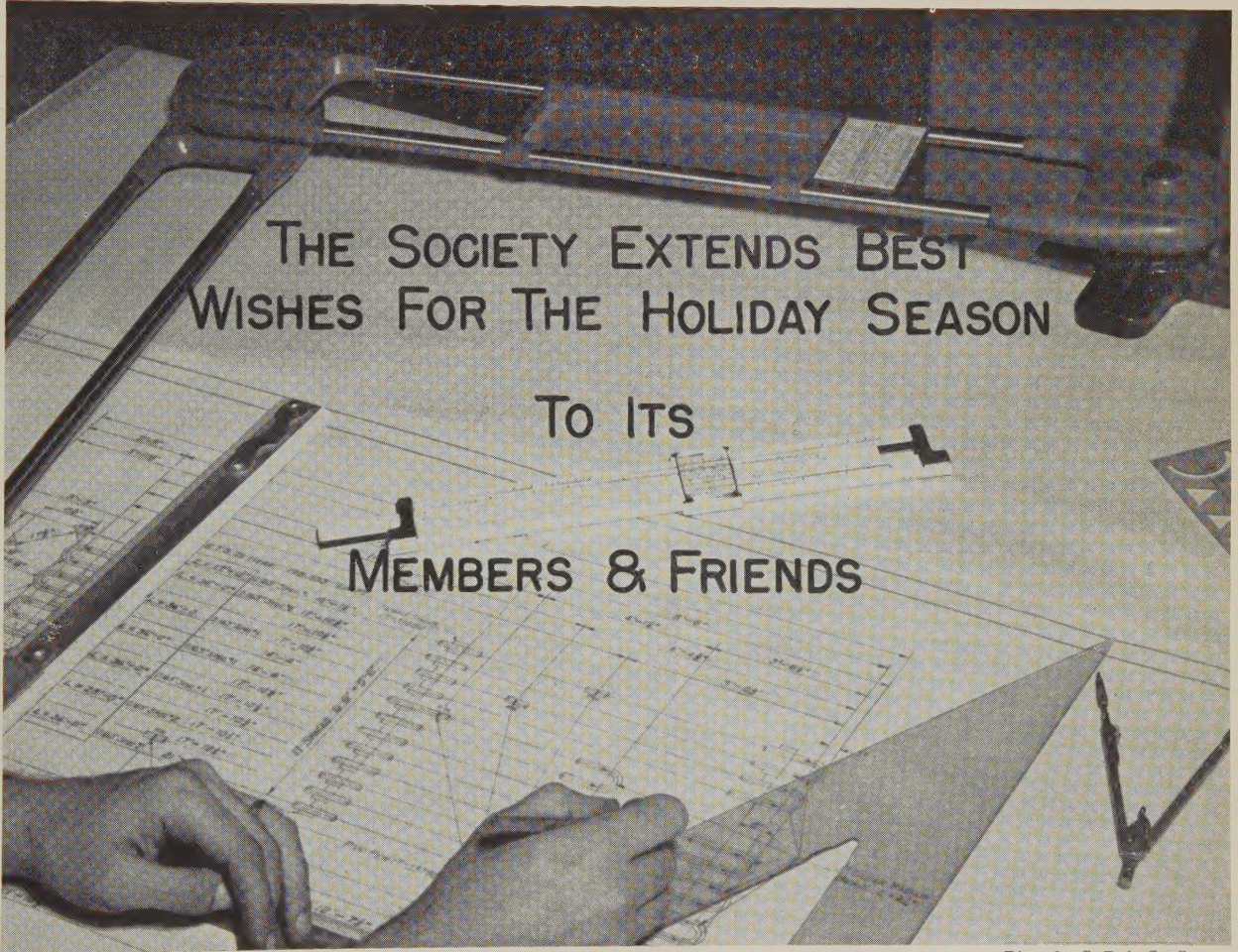


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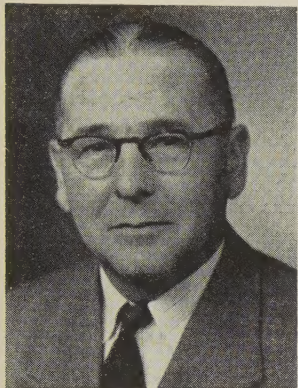
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Of Interest to I. S. P. E.

PRESIDENT'S MESSAGE

This is the season of Thanksgiving, Christmas, and the beginning of a New Year.

Thanksgiving is a season when all mankind should be thankful for the many blessings they enjoy; a home, family, the comforts and ease of life. Be thankful that we live, in comparison to some people, in a free land, enjoy free enterprise and are free to work at a profession or engage in any occupation we so desire.



President Wallace

We have enjoyed these blessings so long, I fear many of us take them for granted, and even some of us have become calloused to their meaning and some of us even demand these blessings without any thought or desire to re-

turn thanks. Give thanks for the men who sacrificed their time, effort, and health to lay the foundation for our many blessings. And you, in all fairness to your children, and your children's children, should endeavor to make, not only the future, but your profession a better and more worthwhile profession. The years move slowly, but progress moves fast, and your deeds and the giving of your time and energy will be the foundation for the Thanksgivings of tomorrow.

Christmas is more of a religious season and rightfully so, and to participate and share the benefits, you must enter into the spirit of "good will" to everyone. The spirit of "good will" to me means "Do unto others whatsoever you would that they should do unto you." Give generously of your "good will" and you will receive "good will."

The New Year's season should be the time for preparing new specifications for yourself and your profession; the drafting of a better and more modern design for living and working. As a suggestion to aid you in your mental recapitulation of the past and your decision for the future, I give you this brief message:

"The good that you do for yourself, dies with you; the good that you do for others, your profession, and your community, lives forever."

DWAIN M. WALLACE, President

All in all, our forefathers did a grand job of founding this country. But we still wonder why they located the cities so far from the airports.

VOX SECRETARII

By P. E. ROBERTS, Executive Secretary

CHRISTMAS PRAYER

Give me the vitality and the industry to do a full day's work every day.

Give me the originality and the dexterity to act faster than my competitors.

Give me the capacity and the ability to deliver more than I receive.

Give me the honesty and sincerity to fairly judge my fellow man and his work.

Give me the simplicity and the graciousness to think clearly.

Give me the patience and willingness to do irritating work well.

Give me the courage and good sense to change my mind.

Give me the poise and humbleness to handle personal success.

Give me the tenacity and steadfastness to finish every hard job.

Give me the faith and the loyalty to have confidence in my associates.

Keep me in good health, guide me to be a good father, and make me a solid citizen.

So be it,

P. E. ROBERTS

1956 Chapter Officers' Conference

One of the decisions made at the Executive Committee meeting in Peoria December 3 was the fixing of the date of the Chapter Officers' Conference. Again this meeting will be held in Peoria on January 28. Announcement of this meeting is made here so that those Chapter officers not yet elected will have a notice of the meeting.

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Illinois Engineering Council

The Illinois Engineering Council met in Chicago on Saturday, December 10, at its 1955 Annual Meeting. The following officers were elected:

President—Ellis Danner (A.A.E.)

First Vice President—Daniel K. Chinlund (A.I.E.E., Chicago Section)

Second Vice President—John G. Duba (I.S.P.E.)

Secretary-Treasurer—Marvin V. Maxwell (A.S.M.E., Chicago Section)

For your information, President Ellis Danner is a member of Champaign County Chapter and Second Vice President Duba is a member of Chicago Chapter.

Professional Society Membership

There has been considerable speculation as to the percentage of members in various professional societies. National Society of Professional Engineers gave the following table, which was first presented in the Bar Association magazine. Comment and/or conclusions are left to you.

Organization	Potential Membership	Actual Membership	% of Membership	Natl. Senior Dues
Amer. Dental Assn.....	84,000	72,000	86	\$20
Amer. Medical Assn.....	180,000	150,000	83	25
Amer. Osteopathic Assn.....	12,371	8,900	72	75
Amer. Inst. of Architects..	15,000 (est.)	10,500	70	50
Amer. Inst. of Accountants..	50,000	25,000	50	40
Amer. Bar Assn.	220,000	53,000	24	16
NSPE	197,000	36,000	18	10

Bills and Ballots

As has been the routine begun in 1949, the 1956 dues statements and the official ballots to the corporate members for the election of officers were put in the mail during the week of December 5. Your cooperation in sending your dues check to the Executive Secretary's Office promptly will not only save money, but also help your Chapter Secretary with his work. The dues record is made in the Executive Secretary's office, the membership card written and sent to your Chapter Secretary, who passes the card along to you. Again this year, the Chapter dues collection envelope is included to the members of most Chapters, exceptions, of course, being those Chapters who do not have Chapter dues. Again—your prompt remittance will be appreciated.

CORRECTION

A letter from Mr. William T. Stevens, City Engineer of Albuquerque, tells us that the Albuquerque *Journal* was in error on September 9, when it stated that "Albuquerque City Engineer accepted an all-expense fishing trip to Mexico." Mr. Stevens' letter says that it was not the City Engineer, but the Director of Public Works who made the trip. The *Illinois Engineer* is sorry if the story caused any embarrassment to Mr. Stevens.

Items of Personal Interest

Chicago Chapter will hold its second annual banquet in the Bismarck Hotel, the Walnut Room, on January 12, 1956, at 6:50 p.m.

Joliet Chapter Representative W. S. Gray was recently elected to the Will County Board of School Trustees to fill the seat vacated by his wife by resignation. Mrs. Gray could not continue to qualify for the Board, since she has returned to full-time active teaching in Joliet schools.

Robert E. Loomis (E-I-T '53), member of Joliet Chapter, has been promoted to Supervisor of Personnel for the Elgin, Joliet and Eastern Railway Company with offices in Chicago. Mr. Loomis has been serving as assistant to the Chief Engineer in Joliet. Loomis and his wife have three boys, age 7, 3, and 9 months.

If there has been any doubt as to the interest in the proposal to work out a solution to bring the Illinois Society and the Illinois Highway Engineers together, the fact that the eleven men asked to attend the meeting in Springfield on Saturday, November 19, were all in attendance should dispel any doubt. The night before, a three-inch snow left the pavement a glare of ice. In spite of this, members of the committee came from Elgin, Toulon, Champaign, Paris, and other points.

Dr. Leslie Bryan, who discussed the progress of aviation over the past fifty years and who outlined a few of the probable developments in the next ten years, spent the two weeks prior to Thanksgiving in an inspection trip at MATS installations in Europe. It is interesting to note that Les reached Wiesbaden in a shorter time than it used to take in traveling by train from Chicago to New York. Les is a Colonel in the Air Force Reserves and Director of the Institute of Aviation, University of Illinois.

The 42nd Annual Illinois Highway Engineering Conference will be held on the University of Illinois campus February 28, 29, and March 1, 1956. Following that, the 8th Annual Illinois Traffic Engineering Conference will be held on March 1 and 2.

The world's largest known animal—bigger than the biggest extinct dinosaur—is the blue whale, sometimes 100 feet long. Smallest is a one-celled animal called *Oicomonas*, found in fresh water and salt, about 1/5000th of an inch long.

"So you've lived in this out-of-the-way place 40 years. I can't see what you find here to keep you busy."

Inhabitant: "Neither can I. That's why I've lived here 40 years."

Fees and Salaries — Ethics and Practice

Two subjects which have always held the interest of the members of the Illinois Society were discussed at the Chapter meetings during November. Chicago Chapter discussed ethics and ethical conduct.

Champaign County Chapter devoted a meeting to Fees and Salaries. A panel of four engineers led the discussion from four vocation points of view, namely, Education, Civil Service, Industry, and Consultants. The remarks and the discussions of the four panelists are of interest to various groups of members in the Society. One panelist, Mr. Ralph D. Wilson, recorded his remarks for you. Mr. Wilson's observations are below.

OBSERVATIONS WITH REFERENCE TO CONSULTING ENGINEER FEES

R. D. WILSON, November 3, 1955

1. Consultant Fees and Employee Wages must be considered together, since wages paid are the principal expense of Consultant business.

2. It cannot be safely assumed that fees on a percent basis can be kept the same while professional wages are being constantly increased because Construction Costs do not vary in the same ratio as professional wages. Example: ASCE Surveys of 1951-53 and 55 show that Engineer Wages have increased about 18% in 4 years while Cost-of-Living index has risen 5.4%. During the same period, *General* Construction Costs have also risen about 22%, according to ENR; but for some areas and classes of work the increase of construction costs has been more in line with cost of living increase.

3. Fringe benefits (Vacation, Sick Leave, Holidays, Bonuses, and Social Security or Pension Allowances) are an additional drain upon consultant fees, and the tendency has been to increase these also. The 1955 ASCE survey shows the cost of these to firms reporting varied from 12 to 18% of base pay. This must be also about a 100% increase since 1939.

4. In addition to the possible discrepancy between increase of wages plus benefits and increase of consultant fees (if based on actual construction costs), there is an added burden upon the consultant firm to produce more and greater miracles, regardless of the odds. The most persuasive evidence I have seen (outside of my own personal experiences) is an article in November 1 "Look Magazine." Here are some quotes:

"There are few diseases for which there is a sole and specific remedy or a universally accepted treatment. The attending physician must exercise his best judgment in deciding which method to use. *Unlike a lawyer or an engineer who can spend days to examine a case or to figure stresses, strains, and gradients*, the doctor frequently is faced with an emergency in which he must take immediate action, applying his highly specialized knowledge. He may later wish he had selected another—and, in retrospect, perhaps a better—method, but he must act without the benefit of hindsight."

I don't believe you will agree that Engineering is an exact science requiring little or no exercise of judgment; and I have never seen the job where the Engineer was not under pressure in his design work, either because of

CHICAGO CHAPTER DISCUSSED ETHICS

The Chicago Chapter at its November meeting, which incidentally was held in Oak Park, conducted a meeting on ethical conduct. Dr. John Logan, Chairman of the Department of Civil Engineering, Northwestern Technological Institute, and Mr. Leonard Crawford, partner of Crawford, Murphy, and Tilly, Springfield, set the theme of the evening by discussing ethics from the educational viewpoint and the consulting engineer viewpoint.

When each speaker had finished his remarks, Program Chairman Linas Brown asked those assembled to divide into five groups of common interest and discuss the question of ethics which was printed in the October issue of the ILLINOIS ENGINEER. After each group had discussed the question for some 15 minutes, the meeting was reassembled to hear the conclusions of the various groups. It is interesting to note that most groups came to the conclusion that it was a border-line case so far as ethical conduct is concerned, but most of those at the meeting agreed that the engineer did not use the proper amount of discretion.

QUESTIONS AND ANSWERS ON ETHICAL CONDUCT

The Editor's invitation to comment on the question, by mail, brings a letter from Rockford Chapter President Warner Johnson, which is printed without comment or without deleting any part of the letter, and four questions from an engineer whose position requires anonymity. Engineer "X" poses some thought-provoking questions. Your comment, with or without signature, is again invited. If your position requires that signature be withheld, we will be glad to withhold your signature.

1. Your boss tells you that your services are no longer necessary. When you ask what your mistake has been, his answer is, "If you don't know, I'm not going to tell you." When will supervisors be chosen for their leadership?
2. What can an engineer do about the so-called "Gentleman's Agreement" between companies?
3. What is the use of the professional seal of an employee in private industry?
4. Is there any violation of the engineering code of ethics for the supervisor to combine and rewrite several engineers' original manuscripts, giving himself as the sole author with no reference to the original source of information?

(Continued from page 3)

the client's position or the limited budget for the item. But I will testify with the author that people are just plain harder-to-please than they used to be, and the complications are multiplied by the modern inventions that one must apply to correct the conditions that are caused by another improvement which eliminated some other condition that people used to accept as unavoidable.

Procedures prescribed by State and Federal Agencies are also a constantly increasing burden; and there are about 20 lawyers to every Engineer, to represent objectors, etc.

5. As to specific recommendations, I can only reflect my own experiences in the operation of a rather small firm doing small to medium-sized projects. We are finding that the minimum percentage fee schedule is out of joint with other existing conditions, with regard to projects up to \$100,000, even if strictly interpreted to apply to the simplest types of Engineering work. The schedule should probably be revised, because clients and beginners are misled as to what the proper charges should be, and persons not fully dependent upon consultant work for basic income plus headquarters and facilities can and sometimes do provide services at these minimum rates or below which would not support the full-time consultant's necessary overhead.

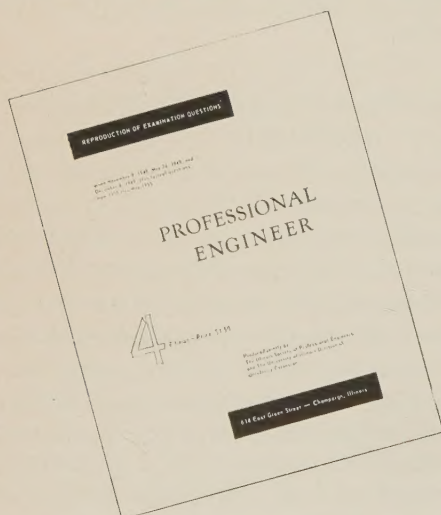
I would suggest that any persons considering the fee

schedule for possible revision should remember that contractors in general feel that they are entitled to 15 or 20% *profit*—not like “fees” which must cover expenses, but nice, clear profit—on a construction job where the Engineer who is fundamentally responsible for the soundness of the work is now rewarded with a living wage only. If the job has had attorney services, the fees for that will be anywhere from 50% less to 50% more than the Engineer's fees, and the amount of work and know-how required is usually (with some exceptions) a fraction of the Engineer's contribution.

Why shouldn't the Engineer's fees reflect the fact that he is as uniquely responsible for good design and honest construction as the doctor is responsible for proper diagnosis and treatment; that he does, usually, far more work than the attorney on the same job, and is of equal professional status; and that the contractor's profit should not be a source of envy to him or a means of inducement to buy him off? These other fees and profits are not going to be reduced; any correction of the discrepancies will have to come by upward revision of Engineers' fees. Without such revision, too, I feel that the wages of salaried Engineers are beginning to bump the ceiling, in the consultant field.

Water Works Superintendent: “When I was a boy, I thought nothing of chopping wood all day.”

His Son: “I don't think so much of the idea myself.”



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Seventeenth Annual President's Address

JOLIET, ILLINOIS, JANUARY 22, 1902

By H. G. PADDOCK

We are once more assembled for the laudable purpose of promoting the best interests, growth, and advancement of our profession, and I extend greeting to you with the sincere hope that you will find this meeting both interesting and instructive. That it will be so, I feel quite certain after looking over the program as prepared by the Secretary.

It is necessary, only, to look at the first topic to find a matter of vast importance to all of us. The question of a deep waterway from Chicago to New Orleans is a subject, not only of great interest to the Engineer, but a matter that is of consequence to the whole Mississippi Valley; in fact, it is of consequence to almost the entire United States. The time is not far distant when the increased density of population will make it necessary to follow in the footsteps of the older European nations. It will be a commercial necessity, not only to connect the Mississippi with the Great Lakes by a waterway that will be navigable for all sizes of craft, but to so improve the channel of the Mississippi and other rivers by a system of canals or otherwise until all are in as near perfect a condition for navigation as is possible. The building of canals will become a necessity, as far as practicable, in all commercial lines. The Hennepin Canal is an example of this. Although certain interests succeeded in fixing such dimensions for it that it will only accommodate very small boats, its construction will solve the engineering problems and demonstrate how much greater advantage it would be to the country if it were large enough to carry any sized vessel, particularly if the deep waterway should be constructed from Chi-

cago to New Orleans via the Illinois river. The engineering problems having been solved, the Engineer will be enabled to make an estimate of the expense of enlarging the Hennepin Canal to a ship canal to make an additional appropriation to finish the work; thereby simplifying the labor of the friends of the measure in securing the appropriation.

The presentation of the subject, "Water Supply for Small Cities," cannot fail to excite great interest; for perhaps no present-day problem has any more vital importance and deserves more well-directed attention than this. Although Illinois is one of the well-watered states, there are very few of the cities that have solved the problem both as to quality and quantity of their water supply. In this connection in many of the cities the question of the purification of sewage must be faced. In some cities this is a matter independent of the water supply, but still none the less difficult to solve. The time will surely come when the cities along the large waterways will be forced to purify their sewage before discharging it.

The subject of good roads has been for many years one in which most of the members of our profession were interested, either directly or indirectly; and it will continue to be so for some time. Good roads in the country are just as necessary to the best development of the farming lands as good streets to the needs and industries of the city. In both, expenditure of money for improvements is a profitable investment when it is not so much as to be a burden to property owners and taxpayers.

In most cities the surface of the first streets was the original ground surface. As soon as there was any considerable travel, the low places were impassable, except while the ground was frozen or during very dry times. In a short time public sentiment demanded that something be done to improve the streets. Then it was decided by the authorities to raise the low portions of the streets out of the water by scraping up earth in these low portions, making a pike with a depression on each side in which water stood the greater part of the summer. This pike was cut by deep ruts by the travel in wet seasons. The next step was to put rock or other hard material on the pike, making an effort quite often to remove the water at the sides by digging open ditches and sometimes by underdrainage. At times, in some of the more progressive cities which were fortunate enough to have the materials at hand, macadam or gravel was put on in a fairly workmanlike manner with comparatively good drainage. Experience demonstrated that the cost of keeping in repair any considerable amount of macadam or graveled streets soon reached the point

EDITORIAL COMMENT

In the daily work of the Executive Secretary's office, it is often necessary to read the records of the Society. The accompanying President's Address was made in Joliet on January 22, 1902, by President H. G. Paddock. Mr. Paddock was President for two years, 1901 and 1902, as was the custom in those days.

The address is of particular interest because of the predictions which Mr. Paddock made which have become reality during the intervening fifty-four years. His predictions about the Hennepin Canal and the financing of country roads by special assessment were not fulfilled. However, his other comments are excellent forecasts of things to come.

The records of the Society through its publication of proceedings in the early days and the pages of the ILLINOIS ENGINEER in more recent times are of great value historically.

P. E. ROBERTS, Editor

where the total revenue available for street improvements was consumed in repairs, leaving nothing for extensions. This led the progressive city to make investigations with a view of adopting some material which did not require such expensive repairs, and at the same time not have too high a cost. Such investigation resulted in the adoption of brick in most localities within a reasonable distance of a factory. Special assessment laws enabled the cities to pave with brick their principal thoroughfares and side streets in the more thickly settled portions. The success of the brick pavement forced a reduction of the price of asphalt so that at the present time, in most localities, those preferring asphalt can obtain it at a price only slightly higher than brick.

The history of the improvement of the country road has already practically followed the city street up to and a little into the macadam and gravel stage. Owing to the much greater frontage for each owner in the country, the present cost of a brick roadway seems to be practically prohibitory in almost every locality. Therefore, it would seem that the price of brick must either materially decline or Yankee ingenuity discover other suitable but cheaper material before the country roads can be put in a condition equal to the city streets.

The laws of the State of Illinois provide that a township may vote to levy a tax for road improvements of not to exceed one dollar on each hundred dollars, for a number of years, not exceeding five, if petitioned to do so; provided that the petition must state the location of the road, or roads, not to exceed two. It would seem that an affirmative vote would be hard to get, and that there should be a provision in the law that some portion of the cost of the improvements (say one-half) must be paid by special assessment on the property benefited. If the petition for the road were to be signed by the owners of one-half of the frontage along the proposed road, public-spirited men would be enabled to make a start in the township. This would go far toward removing the objection that a voter might have against voting for the tax under the present law. A voter who does not live along the line of the proposed road naturally thinks that it would be more just for the owner of the land along the road to pay a greater share than he. In the meantime, the Engineer must use his influence to get

the best results obtainable under the present conditions. However, he must not be disappointed if he fails to accomplish within a short time any radical improvements in the construction of roads, as nothing which the Engineer is called upon to do requires more diplomatic skill than is necessary to convince the average man in authority that his methods are wrong.

The report of the Committee on Surveyors' License Legislation will give some of the reasons why such a bill failed to pass. Nothing was developed in the efforts to have a bill passed, however, to indicate that this Society was not in the right when it favored the passage of a surveyors' license bill. The active advocates of the measure, whatever they may have thought when they first undertook the matter, became fully convinced that the time is not far distant when a bill will be introduced in the Legislature devising some form of surveyors' license law that will be acceptable to a majority of the Legislature and much better for the people than the present county and irresponsible surveyors.

In conclusion, I would like to make a recommendation on the subject of printing our papers in advance of the meeting. Members wishing to discuss a paper read before this Society have no knowledge of the details of the writer's treatment of the subject. It has occurred to several of our members that, if the various papers to be read could be printed and copies put into the hands of each member before the meeting, it would enable those who wished to take part in the discussion to be better prepared. Therefore, I would recommend that the propriety of having the papers printed in time to send each member a copy before the meeting, be referred to the Executive Board with a request that they investigate the feasibility of the matter, and if possible, report during this meeting.

The poorwill, a southwestern cousin of the whippoorwill, is the only bird known to hibernate. One was found sleeping two consecutive winters in a cave.

While the owl cannot move its eyes in their sockets, it does have a great area of vision because it can rotate its head in a large arc of 273 degrees.

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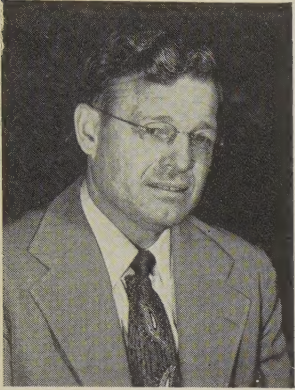
Paving — Water Mains — Sewers

Know The Members of Your Board of Directors

In order that the members of the Illinois Society may learn more about those who are members of the governing body, this feature was begun in July. Here are two more members of the Board.

(Photos by C. Dale Greffe, furnished at no cost to the Society)

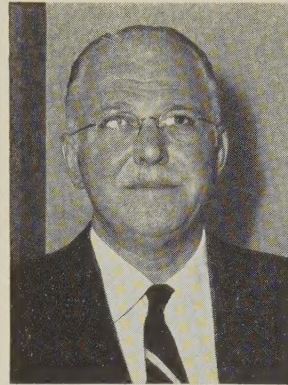
C. Dale Greffe (N'50) Champaign County Chapter Representative became a member of the Board at the close of the 70th Annual Meeting in Rockford this year.



C. Dale Greffe

By vocation, Dale is Associate Professor of Mechanical Engineering, University of Illinois. He has many interests other than his profession. Professionally he does some design work, he is a valuable member of the team of professional engineering refresher course classes. His principal avocation is photography (this picture he took of himself unassisted).

Dale's secondary interests are public speaking and amateur theater. He is a member of the faculty players at the University of Illinois. During his spare time last summer, he rebuilt the kitchen and rooms above and below and this summer he built a new garage.




K. C. Hoeglund

K. C. Hoeglund (S '45, N '52), Chairman of the I.E.C. Representatives, is serving his first term on the Board. K. C. is a native of Rockford, Illinois, born on April 15, 1902. His engineering education was received at Beloit College in Wisconsin and the University of Cincinnati, Ohio. An employee of Bauer and Black in Chicago for several years, K. C. is now Plant Development Manager.

He has served on many Society committees and has been active in Chicago Chapter affairs, serving as Secretary-Treasurer in 1952, Vice President in 1953 and President in 1954.

The average man today lives 30 years longer than he did in 1800. Maybe he has to in order to get his taxes paid.

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Early Bird Reminder



Early Bird Reminder

I.S.P.E. 71st ANNUAL CONVENTION



The Lake County Chapter cordially invites you to attend the 71st Annual Convention to be held on April 12, 13, and 14, 1956, at the beautiful Hotel Moraine on the lake in the City of Highland Park, Illinois. Spend 3 days at this showplace of the North Shore and go home refreshed, relaxed and satisfied.

PUBLICITY COMMITTEE
LAKE COUNTY CHAPTER

LETTERS TO THE EDITOR

Attention: P. E. Roberts, Editor and
Executive Secretary

Subject: Question of Ethics, October,
ILLINOIS ENGINEER

Gentlemen:

An open question of Ethics as published in the ILLINOIS ENGINEER, page 2, requires a very tactful and carefully prepared comment. Not that we should "Pussy Foot" around on ethical problems, nor change our ethical policies as we would change our shirt or tie.

But, as the greatest book on ethical practice guides us, "Let the man free of all guilt cast the first stone."

In an Illinois Constitution on Ethical Practice we state in Article V, Section 8, in part "... The Board shall prepare *Confidential Charges* and shall submit them to the person . . ." Here we are stepping into another State with admittedly only part of the facts and asked to comment or Judge on the Ethics involved.

In contrast to the above and in favor of open discussion on Ethical Practice to sharpen our wits so as to recognize Ethical Traps like this, I hope the Albuquerque Director of Public Works will forgive any direct implications which may be interpreted from the following comment.

Sharpen your thinking on this first.

Tony, da fruit peddler, has just come to this country and brings his cart to the "Market" for the first time.

Mike, a cop, is walking by and Tony recognizes his authority and position by the uniform, so Tony steps up and says, "Mike, I lika you, have dis beeg rosea apple." This is repeated Tuesday, Wednesday, Thursday, etc.

Next week, Monday, Mike comes by Tony's cart and Tony is across the street. Mike likes apples by this time and reaches in to Tony's cart and takes one.

Did Mike steal? Should he be charged with Petty Larceny?

Now Yonny Yonson, the Engeneer, valks bay and reaches in and takas von. Did Yonny steal? Should Mike pinch Yonny? Didn't Tony give Mike "Bag rosea apples" so Mike would protect Tony from Yonnies?

Oh, you say that is just a cheap little apple that's not like a big expensive influencing trip to Mexico. How many of you, "Took an apple to the Teacher" and what was your reason for doing so? You say you loved her in your childish way and wanted to give her something. Did the other kids in the class think of that, or did they put you in the "Tubers Class" seeking influence with the teacher trying to be "Teacher's Pet"?

In our very mixed up ways, which have evolved over the centuries, gifts and friendships have claimed a rough and rocky path with both the giver and the receiver probably having some difference of opinion and understanding on the true reasons.

In discussing Ethical Practice, we are leaving an area of formal education and experience as Engineers and beginning to delve into the protective vocabulary of the

Lawyer and the Minister. Let's make sure we put on the right hat before passing judgment on the case.

Do we have any legal books of case history to turn to to check how others have been judged? Isn't that the first trail a lawyer tries to locate to work up his side of a case? If Mr. Director at Albuquerque is guilty of misconduct, then, as Mr. Roberts prints, "This question has undoubtedly arisen several times in Illinois" aren't these several individuals just as guilty? Who will bring charges and treat these Registered Engineers just the same as Mr. Director of Albuquerque

No mention is made of Mr. Consulting Engineer and his license. Isn't he just as guilty of misconduct as the Director? It takes an offerer and acceptor to make a contract and this type of Ethical problem requires two or more to make it possible for misconduct to be experienced.

You think I have wandered all over the lot to get to a point. Yes, but a person up for judgment deserves to have his full case heard. The meters to measure speed have been perfected and the signs limiting speed have been clearly posted in most States. You can't argue with Radar or Electric Timers. You get in line and pay your fine.

It would make this world a lot easier to live in if Ethical Practice could be as easily classified. A meter to read ethically OK or ethically too fast like the speedometer on your car.

A scientific instrument in the hands of duly authorized Ethical Policemen to pick off ALL offenders as they pass by and a simple system of Justice of the Ethics to check the "Evidence and pass judgment on the case if a 'relatively minor violation' has been 'ticketed'."

You and I do have the most perfect governor yet devised if we haven't let it get calloused and rusty. Our conscience on, "do unto others as we would have them do unto us" thoughts.

Let us as individuals keep this sharp and active to protect ourselves and our fellow Engineers and associates free from unethical practice. Let us hear often from our Ethics and Practices Committee to help us keep sharp like our church activity reminds us to live each day.

Let us finally leave the judgment in this Albuquerque case up to the duly authorized board or committee and make our individual efforts to police our own actions to keep the Engineering Profession clean.

Very thoughtfully yours,
WARNER A. JOHNSON, P.E.
President Rockford Chapter ISPE
Freeport, Ill., Nov. 7, 1955

Nowadays, when a boy holds a girl's hand at the movies, she doesn't know whether he's being romantic or just wants to keep her from eating his popcorn.

President Wallace Visits Lake County

On October 19 Lake County Chapter held its Annual State Officers Night. President Wallace, Vice President Johnson, and Executive Secretary Roberts were in attendance.

During the meeting a short certificate presentation ceremony was held. Two of Lake County's newly registered professional engineers were presented their certificates by President Wallace.

Both President Wallace and Vice President Johnson addressed the group and Executive Secretary Roberts made a few brief remarks.

During the business part of the meeting the plans for the 71st Annual Meeting, which will be held in Lake County Chapter area on April 12, 13, and 14, 1956, were discussed. Elsewhere in this issue there is a page-size drawing reproduced, announcing the affair.



Lake County Chapter Meeting October 19, 1955. Left to right: P. E. Roberts, Executive Secretary; President Dwain M. Wallace; Lake County Chapter President Sidney Danoff; Vice President Royce E. Johnson.

WINTER

The class in school had been required to write a composition on "Winter." The following was turned in by the lad who usually stood at the foot of his class:

"Winter is the coldest season in the year because it comes in winter mostly. In some countries winter comes in summer, and then it is very pleasant. I wish winter come in summer in this country then we could go skating barefooted, we could snowball without giting our fingers cold, and men who go out slay-riding wouldn't halve to stop at every tavern as they do now. It snows more in winter than any other season. A wicket boy took my skates and ran off with them and I couldn't catch him. Mother says judgment will overtake him. Well, if judgment dose he will halve to be pretty lively in his legs for that boy can run buly. Now I will stop."

Woman driver to friend: "The part I don't like about parking is that noisy crash."



Joliet Chapter elects 1956 Officers, November 15, 1955. Left to right: R. A. Brown, Vice President-elect; L. W. Keeler, retiring Joliet Chapter President; L. C. Gilbert, President-elect; William S. Gray, Chapter Representative; P. E. Roberts, I. S. P. E. Executive Secretary; H. A. Hassert, Secretary-elect; and Bernard Anderhous, Treasurer-elect.
—Photo by G. L. Walker (Aff '43)

Joliet Chapter Annual Meeting

Under its revised Constitution, Joliet Chapter held its Annual Meeting on November 15. The picture of the new officers is above.

Following the meeting, a very interesting talk was made by Mr. Paul Blunt, plant manager of U. S. Rubber, Ordinance Ammunition Center, Joliet Arsenal. His talk was followed by a fifteen-minute color film showing some of the safety measures and how the various units respond to a disaster call.

Special mention should be made at this time for the excellent job Ken Waltz has been doing in the past two years in getting out the Chapter's monthly Bulletin.

There is but one good reason for knocking, and that is when, by vigorous hammering, you can open a door to better things.

There is no success that is not based on helpfulness. Co-operation, not competition, is the life of business.

Tomorrow begins today.

"As we go forth to duty, let our hearts know no terror but the fear of wrongdoing, and our minds no anxiety but the earnest desire to toil fruitfully."

Tomorrow does not belong to you—do it today.

If something goes wrong, it is more important to talk about who is going to fix it, than who is to blame.

—Francis J. Gable.

One of the sure ways to happiness is to learn to enjoy all the things you think you dislike.

—Tid-Bits, London.

Trying to settle a problem with oratory is like attempting to unsnarl a traffic jam by blowing horns.

—Grit.

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COST OF LIVING INDEX

The cost of living correction factor to be applied to the I.S.P.E. Schedule of Minimum Fees and Salaries is based upon the Consumer Price Index of the 1947-49 average as determined by the Bureau of Labor Statistics. On the 1947-49 base the correction factor for October, 1955, is 114.9.

I hold every man a debtor to his profession; from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves by way of amends to be a help and ornament thereunto.

Sir Francis Bacon

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If placed in a position as a result of an Engineers Available or Position Available advertisement, applicants agree to pay the established placement fee. These rates are available on request and are sufficient to maintain an effective non-profit personnel service. A weekly bulletin of positions open is available to subscribers. Apply E. S. P. S., Chicago.

MEN AVAILABLE

Ch. Engr. M.E. 34. Eleven yrs. design, dev. and testing chem. eqpt. for production of gases, air-conditioners and welding systems, including pressure vessels. \$10,000. Midwest. 371 PE

Sales. 32. 4 yrs. plant layout, methods, fixtures, jigs, time studies, suggestion systems and supervising training program in electronics and refr. Definitely wants sales. 372 PE

Chem Eng. B.S. and M.B.A. 29. 7 yrs. exp. with coal tar products including lab. production and administration duties. \$525. Midwest. 373 PE

Mine Supt. 31. Min. E. 4 yrs. 10 mos. resp. for mine plans, drill and survey crews, producing tons by open pit method and overall supv. of mining dept. \$7500. U.S. 374 PE

Sales Engr. 33. 6 yrs. project and sales engr. supv. steamfitter labor and all phases of field installation. Set up price structures of combustion installation for sales dept. \$8400 plus. Chicago. 375 PE

Dir. of Engrg. 56. Physics. 12 yrs. design and dev., personnel recruiting, budgeting control, patent systems. 18 yrs. dev., des., apprentice training, sales, order, price, patent publicity and factory. \$12,000. Midwest. 376 PE

Civil Engr. 29. C.E. 3 yrs. asst. resident engr. on constr. of bridges, sewers and paving. Resp. for line and grade, inspection, field changes and qualities for payment. \$5800. Chicago. 377 PE

Process Engr. 34. M.E. 4 yrs. making estimated process and cost analysis. 1 yr. resp. for dealing with vendors on hvy. machinery. 1 yr. designed power trans. eqpt. 3 yrs. supv. of precision insp. on aircraft parts. \$6400. Chicago. 378 PE

Production Engr. 32. 3 yrs. production control mgr., inventory control, shipping and receiving, scheduling, method, and time study in plastic field. \$7000. Chicago. 379 PE

Chem. Engr. 28. M.S., Ch.E. 4 yrs. trouble shooter for petroleum company. 1 yr. lab. and pilot plant batches of varnishes. \$6600. U. S. 380 PE

Adm. Engr. 42. E.E. 1 yr. des. of high voltage lab. and eqpt. 2 yrs. des. of ind. and comm. lighting eqpt. 4 yrs. supv. of steam generating and substation design-drafting. \$10,000. Midwest. 381 PE

Arch. Supt. 43. 6 yrs. arch. and constr. work from draftsman to arch. supt. on R.R., ind. and comm. bldgs. and power plants. \$6800. Chicago. 382 PE

POSITIONS AVAILABLE

Designer. M.E. Age: to 35. Duties: layout and design of bulk material handling eqpt. for Mfg. matl. handling. Sal.: \$5000-\$7500. Loc.: Chicago. Empl. will neg. fee. C-4010

Struct. Designer. B.S.-Eng. M.E. or C.E. Age: to 35. Duties: layout and design of bulk material handling eqpt. For Mfg. of matl. handling. Sal.: \$5000-\$7500. Loc.: Chicago. Employer will negotiate the fee. C-4037

Sales. 3 plus yrs. exp. in material handling work in sales or application. Duties: Develop new sales dept. on overhead material handling eqpt. Occasional traveling. Car req'd. For Mfr. Agents. of material handling eqpt. Sal.: \$8400. Loc.: Indiana. Empl. will pay the fee. C-4046

Tech. Editor. M.E., E.E., I.E., or A.E. educ. Age: 25-35. 3 plus yrs. exp. in tech. writing in control or instr. field. Duties: Asst. editor on tech. society's publication staff, handling original articles, field reports, re-write, evaluating material, and planning complete monthly issues on automatic controls and automation. Occasional traveling. For Society of Tech. Sal.: \$7000-\$9000. Loc.: Pa. C-4047

Des. Drafts. Struct. Grad. or equiv. Age: 30 plus. 5 plus yrs. exp. on board on steel and concrete indus. bldgs. Duties: All board work steel and reinf. concrete des., layout and drafting on chem. plants. Good company benefits. Must be U. S. citizen. For engrg. and constr. co. Sal.: \$625-\$650. Loc.: Chicago Loop. Employer will pay the fee. C-4056

Designer-Draftsman. Age: 25-35. 3 plus yrs. exp. in machinery, conveyors, or allied conveyors. Know: structure design. Duties: designing and drafting work on conveyors systems. For Mfr. of conveyors. Sal.: Up to \$7500. Loc.: Chicago. Employer will pay the fee. C-4066

Ind. Engr. I.E. or M.E. Age: 27-35. 4 plus yrs. exp. in hvy. industry such as basic steel, fabrication or rolling mill. Duties: In rolling mill assignments on plant layout, cost reduction methods development, time study and production standards. For Mfr. of alum. Sal. \$615-\$800/mo. Loc.: W. Virginia. C-4122

Stress Analyst. M.E. Exp. in piping systems analysis. Know: math. and mechanics. Duties: piping systems, stress analysis on high temperature and high pressure systems. For Mfr. Sal.: \$6500-\$8500. Loc.: Pa. Employer might negotiate the fee. C-4109

Asst. Supt. Age: 35-55. 5 plus yrs. exp. in welding of alloys and preferably stainless steels. Know: fixtures and welding engrg. Duties: Asst. supt. of job shop fabricating and welding stainless steel and other alloy products ranging into large heavy tanks. For job shop fabricators of stainless steel. Sal.: \$7000-\$9000. Loc.: Chicago. Employer will pay the fee. C-4098

Supt. Age: Up to 43. 3 plus yrs. exp. in supv. people in mfg. industry. Know: tooling punch press and welding. Duties: resp. for all production. For Mfr. of steel chairs and stands. Sal.: \$8000-\$9000. Loc.: Wisconsin. C-4127

Terminal Supt. Engrg. training. Age: 30-40. 3 yrs. exp. supv. Duties: resp. for operation of truck freight terminal. Training and exp. in methods improvement and cost reduction, required aggressive man with supv. exp. Opportunity to step into top post shortly. Start evenings. For transportation warehousing. Sal.: \$7500-\$8000. Loc.: Chicago. Employer will negotiate the fee. C-4136

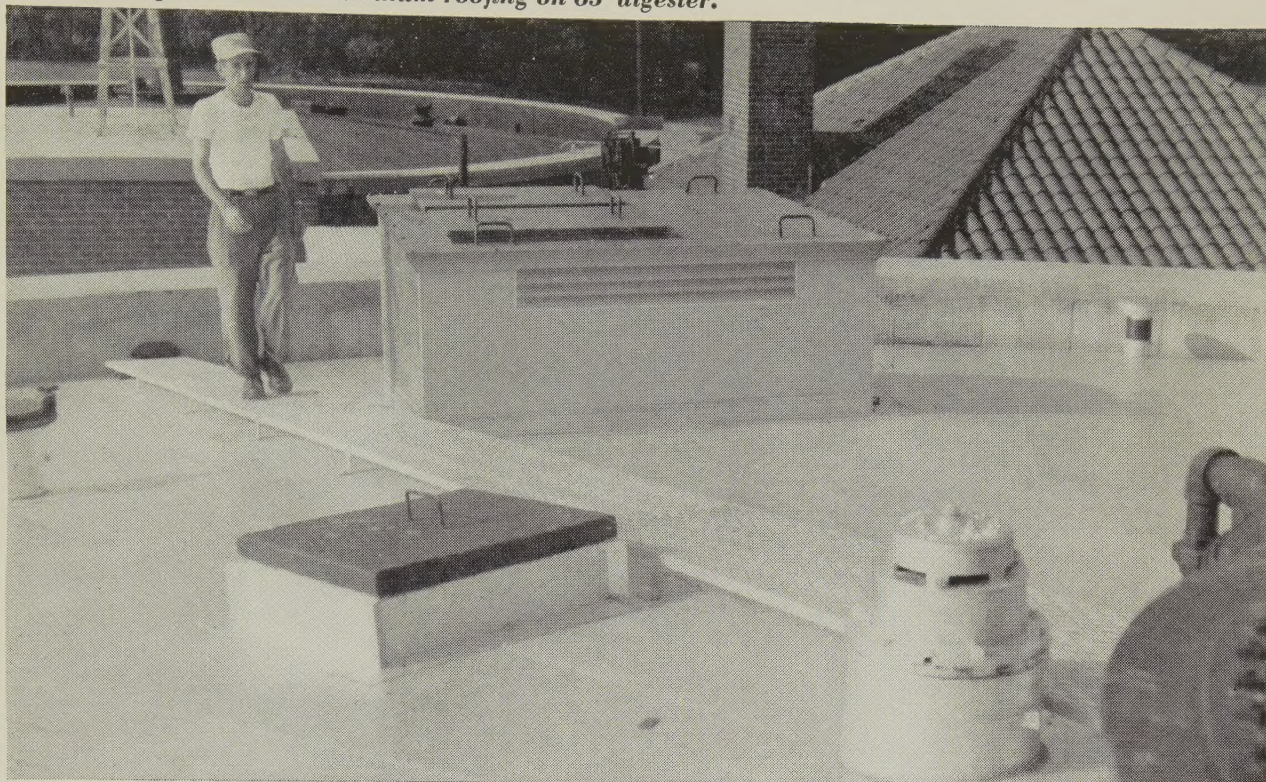
Project Engr. Des. and dev. B.S., M.E. Age: 25-40. Know: instruments, controllers, servos. Duties: designing and dev. instruments. (a) to carry development of comptrollers, recorders, indicators from research through production. (b) A jr. man to carry any portion of this under direction of project engr. For Mfr. of instrs. Sal.: \$6000-\$10,000. Loc.: New York. C-4168

Development Engr. M.E. Age: 35-50. 5 plus yrs. exp. as a proven designer of machine tool or working devices. Know: machine shop practice. Duties: supv. taking new machine tools from patent stage to production design through test pilot models, etc. For Mfr. of tools. Sal.: \$9000-\$14,000. Loc.: Florida. Empl. will pay the fee. C-4170

Ch. Production Engr. M.E. Age: 35-45. Know: wood and steel mfg. Duties: supv. project engrs., processing, automation, trouble shooting. Conveyorizing, redesign of product for cost reduction, parts drawings, taking product from product engrg. and put it into mfg. Some traveling. For Mfr. of wood and steel products. Sal.: \$10,000. Loc.: Wise. Empl. will pay the fee. C-4173

Project Engr. Age: 27-35. 3 plus yrs. exp. in drafting and designing of business machines, photographic eqpt. Know: stampings or die-castings. Duties: project work designing and dev. eqpt. of a photographic nature with small mechanisms. For Mfr. of photographic eqpt. Sal.: \$6000-\$7500/yr. Loc.: Chicago. Empl. will pay the fee. C-4175

PFT Floating Cover with aluminum roofing on 65' digester.



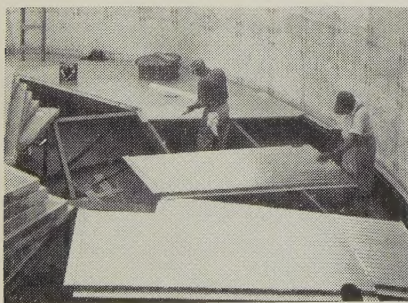
At Champaign-Urbana, Illinois...

A sewage plant invests in long-range economy

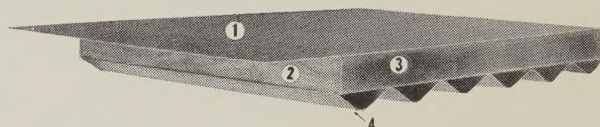
PFT metal roofing on new Floating Cover provides longer life, better insulation

With future economies in mind, the Champaign-Urbana Sanitary District specified a *PFT Floating Cover* with *metal-clad roofing* for their new 65' diameter digester.

The metal roofing provides four distinct advantages over conventional wood types: (1) longer life—equal to the life of the Floating Cover, (2) more efficient insulation, (3) fewer maintenance problems, (4) easier assembly and installation.



Shown at actual installations, PFT metal sections are easily unpacked and assembled. Cardboard boxes in foreground contain panels as they are shipped.



Section of roofing showing (1) aluminum top sheet, (2) inch-thick fiber-glass insulation, (3) aluminum reinforcing channel, (4) corrugated supporting ribs.

PFT metal roofing consists of prefabricated sections with embossed aluminum top sheets, each piece marked for easy assembly at the plant site. The sections are designed for close fitting in the field with a 3" lap of top metal covering at all joints (see illustration). Cutout sections are provided to fit around sampling walls, hatch framing, manholes, etc.

With fiber-glass insulation, PFT metal roofing resists heat loss and keeps digester heating costs at a minimum.

Ventilators are provided for the space between ceiling plate and roof deck. Also included is a 19" wide walkway of galvanized steel, deformed for sure footing.

The PFT Floating Cover at Champaign-Urbana includes a complete *Pearth Gas Recirculation System*—

an economical process that controls the formation of scum, making more effective use of the entire digestion tank capacity.

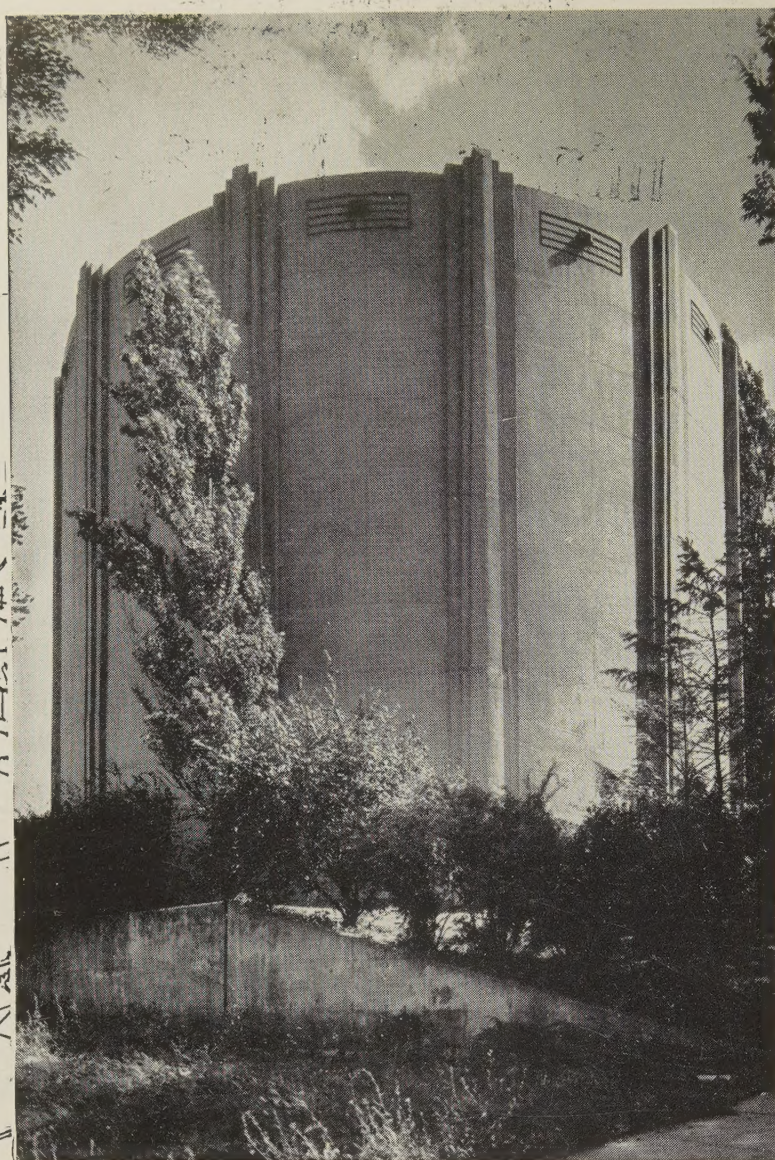
Design of plant by / Wilson & Anderson, Consulting Engineers Champaign, Illinois

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Any city, large or small, can obtain lasting benefits by building such a reinforced concrete water tank. Its sturdy construction gives it the durability to withstand the weathering action of any climate. Its enduring beauty makes it a structure of which the entire community always can be proud.

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